

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/KR2003/002775

## A. CLASSIFICATION OF SUBJECT MATTER

IPC7 C03B 33/09

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC B23K, C03B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
Korean Patents and Applications for Invention since 1975  
Korean Utility Models and Applications for Utility Models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
NPS, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 2001-113384 A(KOIKESANSOKOGYO CO LTD) 24.Apr.2001 see the whole document	1, 6 - 8
A	JP 10-323779 A(HITACHICABLE LTD) 08.Dec.1998 see the whole document	1, 7, 8
A	JP 60-251138 A(HOYA CORP) 11.Dec.1985 see the whole document	1
A	RU 2024441 C1(Kondratenko) 15.Dec.1994 see the whole document	1, 6-8
A	KR 2001-63794 A(SAMSUNG ELECTRIC CO LTD) 09.Jul.2001 see the whole document	1, 6 - 8
A	KR 2000-51013 A((SAMSUNG SDI CO LTD)16.Aug.2000 see the whole document	1,, 6 - 10
A	KR 2000-38519 A(SAMSUNG ELECTRIC CO LTD) 05.Jul.2000 see the whole document	1, 6 - 9

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

\* Special categories of cited documents:

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"E" earlier application or patent but published on or after the international filing date  
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"O" document referring to an oral disclosure, use, exhibition or other means  
"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention  
"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone  
"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art  
"&" document member of the same patent family

Date of the actual completion of the international search  
25 MARCH 2004 (25.03.2004)

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Korean Intellectual Property Office  
920 Dunsan-dong, Seo-gu, Daejeon 302-701,  
Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

PARK, Hwan Don

Telephone No. 82-42-481-5558



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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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JP 10-323779 A	08.12.1998	NONE	
JP 60-251138 A	11.12.1985	EP208394 A2 DE3688719 C0 US4976563 A AU5683386 A1	14.01.1987 26.08.1993 11.12.1990 15.01.1987
RU 2024441 C1	15.12.1994	US5609284 A EP633867 A1 DE69304194 C0 AU674677 B2	11.03.1997 18.01.1995 26.09.1996 09.01.1997
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KR 2000-51013 A	16.08.2000	NONE	
KR 2000-38519 A	05.07.2000	NONE	